

15
CLAIMS

What is claimed is:

1. A method for changing defined elements in a previously compiled program using a data structure description file without modifying the compiled program, comprising the steps of:

loading a data structure description file from a storage location accessible to the compiled program, wherein the data structure description file contains definitions of data structures and is not linked into the compiled program;

parsing the data structure description file for a configurable filter in communication with the compiled program;

validating the data structure description file using the configurable filter; and defining the compiled program's data structures based on the definitions of the data structures in the data structure description file.

2. A method as in claim 1, wherein the step of validating the data structure description file further comprises the step of validating the data description file based on language parameters loaded from the data structure description file.

3. A method for changing data structures and validation rules in a previously compiled program using a structure and rules description file without modifying the compiled program, comprising the steps of:

loading a structure and rules description file that contains definitions of data structures and validation rules from a storage location accessible to the compiled program, wherein the structure and rules description file is not linked into the compiled program; and

parsing the structure and rules description file into a configurable filter in the compiled program;

validating the structure and rules description file in the configurable filter; and

defining the compiled program's data structures and validation rules based on the definitions in the structure and rules description file.

4. A method as in claim 3, further comprising the step of supplying help files related to the data structure and validation rules using help information stored in the structure and rules description file.

5. A method as in claim 3; further comprising the step of applying validation rules within the compiled program in order to check data values.

6. A method as in claim 5, further comprising the step of applying the validation rules in the compiled program to provide enumerated values for data values.

7. A method as in claim 5, further comprising the step of applying validation rules in the compiled program to verify that data structures follow a pattern as defined by a regular expression.

8. A method as in claim 5, further comprising the step of applying validation rules in the compiled program to determine the interdependency of validation rules.

9. A method as in claim 8, further comprising the step of applying interdependent validation rules based on an object's value.

10. A method as in claim 3, wherein the step of validating the structure and rules description file further comprises the step of validating the structure and rules description file against a configurable filter that includes defined keywords, data structures, and a validation language.

11. A system for changing data structures and validation rules in a previously compiled program using a structure and rules description file, without modifying the compiled program, comprising:

a structure and rules description file containing definitions for data structures and validation rules, wherein the structure and rules description file is not linked into the compiled program;

a configurable input filter enabled to parse and validate the structure and rules description file as the structure and rules description file is read from a storage location; and

wherein the compiled program is in communication with the configurable input filter, the compiled program being configured to instantiate the program's data structures and validation rules based on the definitions received from the structure and rules description file.

12. A system as in claim 11, further comprising a user interface in the compiled program that is configured to enable access to the data structures and validation rules.

5 13. A system as in claim 11, further comprising a validation status module to report the validation status for data structures and validation rules in the compiled program.

14. A system as in claim 11, further comprising a help system module configured to provide help information about the data structures and validation rules.

10

15. A system as in claim 11, wherein the structure and rules description file further comprises data attributes.

16. A method of delivering software objects in a computing environment using a compiled software manager with data structures and validation rules that can be modified without re-compiling the software manager, comprising the steps of:

15

parsing data structure and validation rules read from a structure and rules description file located in a storage location accessible to the software manager;
translating the parsed data structure and validation rules into an internal program data structure and validation rules for the compiled software manager; and
20 creating a software install image using the compiled software manager, based on the program data structure and validation rules.

20

17. A method as in claim 16, further comprising the step of installing software components to the computing environment using the software install image created.

25

18. A method as in claim 16, further comprising the step of enabling additional software components to be installed into the computing environment by including additional data structure elements in the structure and rules description file.

30

19. A method as in claim 16, further comprising the step of using defined keywords in the structure and rules description file.

20. A method as in claim 19, further comprising the step of adding defined keywords to the data structure as included in the structure and rules description file.

21. A method as in claim 16, further comprising the step of editing the structure and rules description file using a text editor to change the data structure and validation rules in the structure and rules description file.

22. A method as in claim 16, further comprising the step of including help information related to the data structure and validation rules in a separate help file.

23. A method as in claim 21, further comprising the step of providing access to the help information for the data structure and validation rules via the compiled program.

24. A system for delivering software objects in a computing environment using data structures and validation rules that can be modified without recompilation, comprising:

- a structure and rules description file containing definitions for data structures and validation rules, wherein the structure and rules description file is not linked into the compiled software manager;
- a configurable input filter that is configured to parse and validate the structure and rules description file as the structure and rules description file is read from a storage location;
- a compiled software manager in communication with the configurable input filter, the compiled software manager being configured to instantiate data structures and validation rules in the compiled software manager based on the definitions received from the structure and rules description file; and
- a product specification file generated from the compiled software manager, based on the program data structure and validation rules.

25. A system for delivering software objects as in claim 24, further comprising a software install image generated by the compiled software manager using the product specification file.

26. A system for supplying data structures and validation rules in a previously compiled program using a structure and rules description file, without modifying the compiled program, comprising:

a structure and rules description file containing definitions for data structures and validation rules, wherein the structure and rules description file is not linked into the compiled program;

a parser configured to parse the structure and rules description file as the structure and rules description file is read from a storage location; and

a configurable input interpreter in the compiled program and in communication with the parser, the configurable input interpreter being configured to interpret the structure and rules description file when the compiled program is executing and configured to instantiate the program's data structures and validation rules based on the definitions received from the structure and rules description file.

27. A system as in claim 26, further comprising instantiated data structures and object code to manipulate the data structures, the object code being created by the configurable input interpreter from the definitions received from the structure and rules description file.

28. A system as in claim 26, further comprising a user interface in the compiled program that is configured to enable access to the data structures and validation rules.

29. A system for changing data structures and validation rules in a previously compiled program using a structure and rules description file, without modifying the compiled program, comprising:

a structure and rules description means for containing definitions for data structures and validation rules, wherein the structure and rules description means is not linked into the compiled program;

a configurable input means for parsing and validating the structure and rules description means as the structure and rules description means is read from a storage location;

wherein the compiled program is in communication with the configurable input means, the compiled program being configured to instantiate the program's data structures and validation rules based on the definitions received from the structure and rules description means; and

a user interface means in the compiled program that is configured to enable access to the data structures and validation rules.

30. An article of manufacture, comprising:

5 a computer usable medium having computer readable program code means embodied therein for changing defined elements in a previously compiled program using a data structure description file without modifying the compiled program, the computer readable program code means in the article of manufacture comprising:

10 computer readable program code means for loading a data structure description file from a storage location accessible to the compiled program, wherein the data structure description file contains definitions of data structures and is not linked into the compiled program;

computer readable program code means for parsing the data structure description file for a configurable filter in communication with the compiled program;

15 computer readable program code means for validating the data structure description file using the configurable filter; and

computer readable program code means for defining the compiled program's data structures based on the definitions of the data structures in the data structure description file.